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动物分类学报

SYNOPSIS OF THE GENUS *NANATKA* YOUNG, WITH DESCRIPTIONS OF TWO NEW SPECIES FROM CHINA (HEMIPTERA, CICADELLIDAE, CICADELLINAE)

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Abstract This paper deals with the nine species of the genus *Nanatka* Young. Among them, two species (*N. teluma* and *N. attenuata*) are described and illustrated as new from China. A key separating all species is provided. The type series are deposited in the Institute of Zoology, Chinese Academy of Sciences (IZAS) and the Collection of the Entomological Museum, Northwest A & F University (EM).

Key words Hemiptera, Cicadellidae, Cicadellinae, *Nanatka*, new species, China.

The genus *Nanatka* (Cicadellinae, Cicadellini) was erected by Young (1986) with *Nanatka deficiens* Young as its type species. Subsequently new species from China were added i. e. Cai *et* Kuoh (1995) added five species and also added further characters for the genus, and Cai *et* Shen (1998) described a further new species. In the present work two new species from China are described and illustrated and a key of the nine known species is given. The respective type series are deposited in the Institute of Zoology, Chinese Academy of Sciences (IZAS), the Collection of the Entomological Museum, Northwest A & F University (EM).

Nanatka Young, 1986

Nanatka Young, 1986: 150. Type-species: *Nanatka deficiens* Young, 1986.
Nanatka Young; Cai *et* Kuoh, 1995: 460.

Head weakly produced, median length of crown from 4/10 to slightly more than 6/10 interocular width and from 1/4 to slightly more than 1/2 transocular width, anterior margin broadly rounded in dorsal view, transition from crown to face rounded. Crown concave, with interocellar area convex, ocelli before a line between anterior eye angles. Clypeus flattened or slightly concave, muscle impressions distinct, transclypeal suture obscure, clypellus convex, lateral clypeal sutures extending to crown or onto crown in some specimens, antennal ledges not protuberant, their ventral margins acutangular. Pronotum with width less than transocular width of head, lateral margins slightly divergent posteriorly, dorsopleural carinae not distinct, disk obscurely transversely striate, posterior margin slightly concave. Scutellum slightly convex behind transverse depression, finely punctate medially, striate laterally. Metepimeron not exposed when wings at rest. Forewing short, not attaining abdominal apex; appendix absent; venation obscure in some female specimens. Hindwing very short. Hindleg with femoral setal formula 2∶0∶0.

Male pygofer in lateral view shorter than plate, numerous irregularly arranged macrosetae at posterior margin, pygofer process absent. Subgenital plates in lateral view exceeding pygofer apex, broad basally to slightly distad of midlength, thereafter more or less parallel sided and rounded apically; numerous microsetae dorsally and apically and several irregularly arranged macrosetae ventrally from near base to two thirds distance from base to apex. Style apical process robust. Connective broadly Y-shaped. Paraphysis in lateral view robust, curved dorsally and tapered to acute apex; articulating with aedeagus near midlength. Aedeagal shaft long or short.

Distribution. Nepal and China.

Key to species (♂)

1. Crown uniformly dull yellow ………………………………… 2
   Crown dull yellow with dark spot or markings ……………… 3
2. Aedeagal shaft without process at ventral midlength ………………
   ………………………………… *Nanatka baiyunana* **Cai** *et* **Shen**
   Aedeagal shaft with a process at ventral midlength ………………
   ………………………………… *Nanatka fuscula* **Cai** *et* **Kuoh**

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3. Aedeagal shaft narrow basally, broadened distally in lateral view ……………… 4
Aedeagal shaft not as above ……………… 7
4. Paraphysis with lateral flange-like processes at apex ……………… *Nanatka teluma* **sp. nov.**
Paraphysis not as above ……………… 5
5. Apex of aedeagal shaft acute in lateral view ……………… *Nanatka attenuata* **sp. nov.**
Apex of aedeagal shaft very blunt in lateral view ……………… 6
6. Pygofer with posterior margin rounded ……………… *Nanatka castenea* **Cai** et **Kuoh**
Pygofer with posterior margin broadly straight ……………… *Nanatka deficiens* **Young**
7. Forewing grayish-orange without a blackish-brown stripe ……………… *Nanatka unica* **Cai** et **Kuoh**
Forewing white with a blackish-brown stripe ……………… 8
8. Aedeagal shaft broad and short in lateral view ……………… *Nanatka nigrilinea* **Cai** et **Kuoh**
Aedeagal shaft slender ……………… *Nanatka albovitta* **Cai** et **Kuoh**

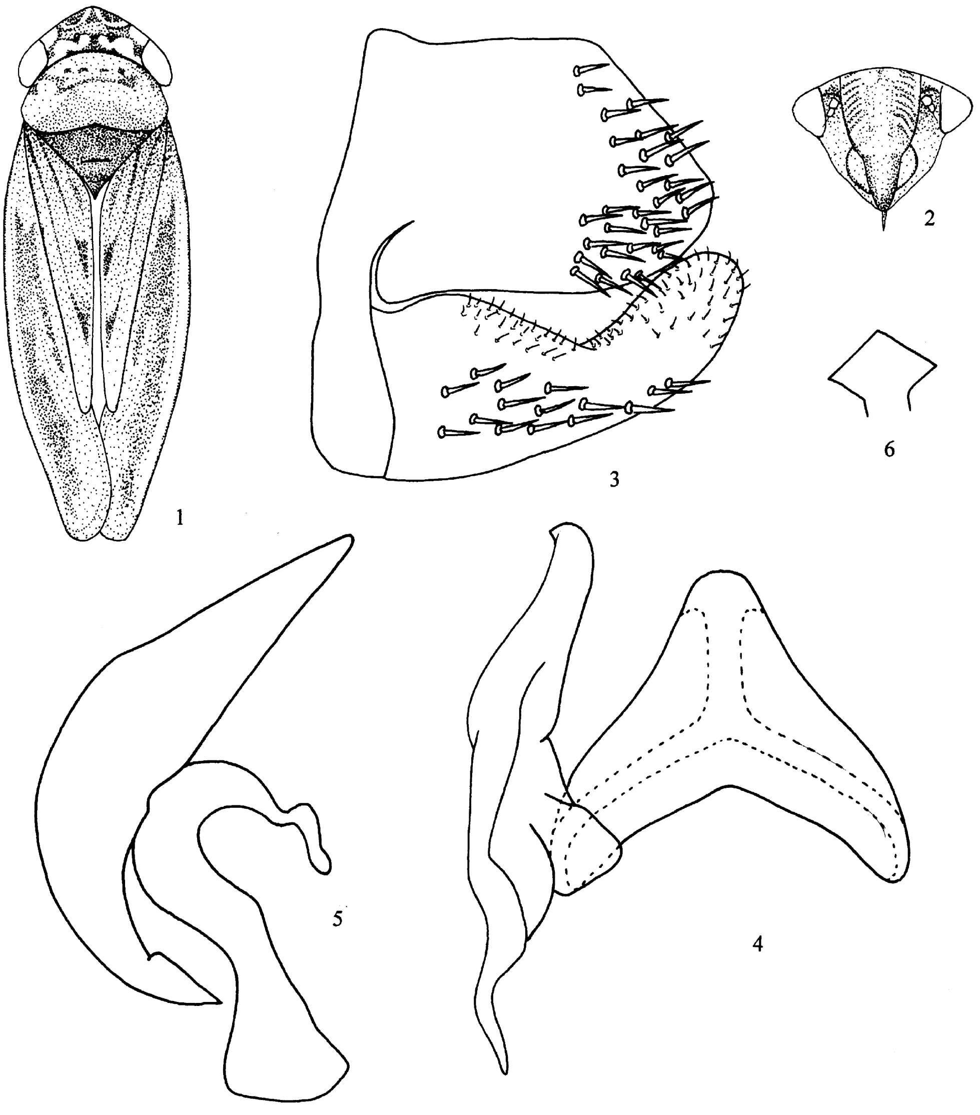
Nanatka teluma sp. nov. (Figs. 1-6)

Length (including tegmen.): ♂5.5 mm, ♀6.3 mm.

Structural characters as in generic description.

Crown blackish brown, markings next to anterior margin and narrow transverse markings bordering posterior margin, dull yellow to orange. Face dull yellow, transverse streaks on frontoclypeus brown, anteclypeus dull yellow to brown. Pronotum and scutellum blackish brown, the former with several brown markings on anterior part, posterior part brown. Forewing with clavus dull yellow except brown veins, corium dull yellow with a wide brownish longitudinal stripe medially.

Male pygofer side in lateral view shorter than subgenital plate, posterior margin tapered to narrowly rounded apex, with numerous macrosetae. Subgenital plates in lateral view broad basally to slightly distad of midlength, thereafter more or less parallel sided and



Figs. 1-6. *Nanatka teluma* sp. nov.
1. Male habitus, dorsal view. 2. Face. 3. Male pygofer, lateral view. 4. Right style and connective, dorsal view. 5. Aedeagus and paraphysis, lateral view. 6. Apex of paraphysis, ventral view.

broadly rounded apically; numerous microsetae dorsally and apically and several irregularly arranged macrosetae ventrally from near base to two thirds distance from base to apex. Style apical process robust. Connective broadly Y-shaped, extending posteriorly slightly less than style apex. Paraphysis in lateral view robust, curved dorsally in distal part, with flange-like lateral process; articulating with aedeagus near midlength. Aedeagal shaft in lateral view narrow basally, broadened gradually to convex apex.

Holotype ♂ (EM), Shaanxi Province, Mt. Taibai (33.9°N, 107.7°E), Shangbaiyun, 1 800 m, 7 June 1985. Paratypes 2 ♀♀ (EM), Shanxi Province, Ningshan, Guankou, 15 Aug. 1984, 18 Aug. 1984, JIANG Fan leg.

This new species is similar to *N. castenea* Cai *et* Kuoh, but can be distinguished by: 1) paraphysis with lateral flange-like process at apex, 2) aedeagal shaft in lateral view broadened gradually to convex apex.

Etymology. The species name is derived from the Latin word *telum*, indicating the shape of apex of paraphysis.

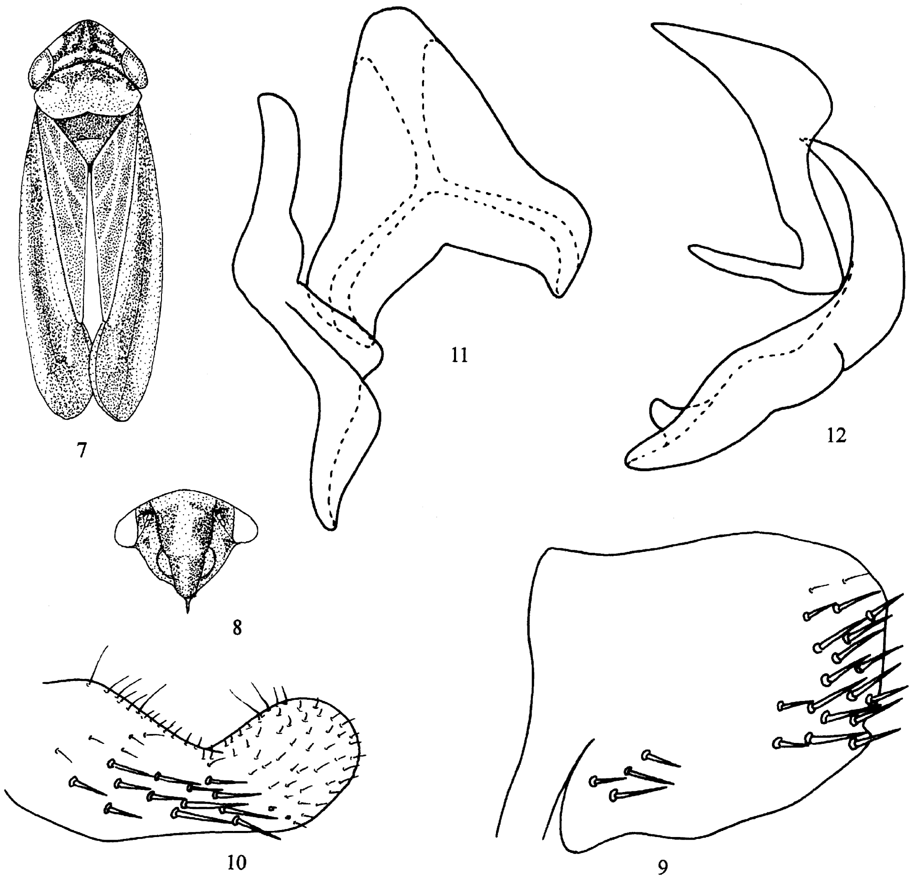
Nanatka attenuata **sp. nov.** (Figs 7-12)

Length (including tegmen): ♂4.1 mm.

Structural characters as in generic description.

Crown blackish brown, markings next to anterior margin and narrow transverse markings bordering posterior margin, light yellow. Face light yellow, lateral margin of frontoclypeus and anteclypeus blackish brown. Anterior part of pronotum dull yellow with a black transverse stripe, posterior part and scutellum blackish brown. Forewing with clavus brown except light yellow veins, corium light yellow with a wide brownish longitudinal stripe at middle.

Male pygofer side in lateral view shorter than subgenital plate, posterior margin broadly truncate with a slight protuberance at posterior ventral margin; with numerous macrosetae. Subgenital plates in lateral view broad basally to slightly distad of midlength, thereafter more or less parallel sided and broadly rounded apically; numerous microsetae dorsally and apically and several irregularly arranged macrosetae ventrally from near base to two thirds distance from base to apex. Style apical process robust. Connective broadly



Figs. 7-12. *Nanatka attenuata* sp. nov.

7. Male habitus, dorsal view. 8. Face. 9. Pygofer lobe, lateral view. 10. Left subgenital plate, lateral view. 11. Right style and connective, dorsal view. 12. Aedeagus and paraphysis, lateral view.

Y-shaped, extending posteriorly slightly farther than style apex. Paraphysis in lateral view robust, curved dorsally in distal part; articulating with aedeagus near midlength. Aedeagal shaft in lateral view narrow basally, broadened over distal half and gradually tapered to acute apex.

Holotype ♂ (IZAS), China, Gansu Province, Wenxian (33° N, 104.6° E), Qiujiaba, 2 550 m, 20 June 1999, WANG Hong-Jian leg.

This new species is similar to *N. castenea* Cai *et* Kuoh and *N. teluma* sp. nov., but can be distinguished by: 1) pygofer with posterior margin broadly truncate with a slight protuberance at posterior ventral margin; 2) aedeagal shaft tapered to acute apex.

Etymology. The species name is derived from the Latin word *attenuate,* indicating the tapering aedegal apex.

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中国透大叶蝉属分类概要及二新种记述 (半翅目, 叶蝉科, 大叶蝉亚科)

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摘 要 对中国透大叶蝉属 *Nanatka* Young 进行了分类概述, 确认我国现知 9 种, 其中包括 2 新种, 矛突透大叶蝉 *N. teluma* sp. nov. 和渐细透大叶蝉 *N. attenuata* sp. nov., 文中给出了该属所有种的检索表。模式标本分别保存于中国科学院动物研究所和西北农林科技大学昆虫博物馆。

关键词 半翅目, 叶蝉科, 大叶蝉亚科, 透大叶蝉属, 新种, 中国.
中图分类号 Q969.362.8.